| Ref<br># | Hits  | Search Query   | DBs                | Default<br>Operator | Plurals | Time Stamp       |
|----------|-------|--|--------------------|---------------------|---------|------------------|
| L1       | 14902 | collagen same matrix   | US-PGPUB;<br>USPAT | ADJ                 | ON      | 2005/12/23 13:47 |
| L2       | 1907  | collagen with wound (heal\$3 dress\$3)                       | US-PGPUB;<br>USPAT | ADJ                 | ON      | 2005/12/23 13:48 |
| L3       | 1127  | I1 and I2  | US-PGPUB;<br>USPAT | ADJ                 | ON      | 2005/12/23 13:48 |
| L4       | 933   | I3 and (crosslink\$4 cross<br>link\$4 link\$4)               | US-PGPUB;<br>USPAT | ADJ                 | ON      | 2005/12/23 13:49 |
| L5       | 51    | thermal\$ NEAR3 reconstit\$                                  | US-PGPUB;<br>USPAT | ADJ                 | ON      | 2005/12/23 13:51 |
| L6       | 1     | I5 with (monosaccharide-aldehyde or monosaccharide aldehyde) | US-PGPUB;<br>USPAT | ADJ                 | ON      | 2005/12/23 13:52 |
| L7       | 237   | l4 and sponge  | US-PGPUB;<br>USPAT | ADJ                 | ON      | 2005/12/23 13:52 |
| L8       | 178   | I7 and (multi-layer collagen layers)                         | US-PGPUB;<br>USPAT | ADJ                 | ON      | 2005/12/23 13:53 |
| L9       | 119   | I8 and @ad<"20020603"  | US-PGPUB;<br>USPAT | ADJ                 | ON      | 2005/12/23 13:54 |

| Ref<br># | Hits  | Search Query  | DBs                | Default<br>Operator | Plurals | Time Stamp       |
|----------|-------|---|--------------------|---------------------|---------|------------------|
| L1       | 10195 | collagen same (crosslink\$4 cross<br>link\$4 link\$4) | US-PGPUB;<br>USPAT | ADJ                 | ON      | 2005/12/23 13:56 |
| L2       | 2457  | l1 and wound (heal\$3 dress\$3)                       | US-PGPUB;<br>USPAT | ADJ                 | ON      | 2005/12/23 13:57 |
| L3       | 1137  | sponge near4 matrix                                   | US-PGPUB;<br>USPAT | ADJ                 | ON      | 2005/12/23 13:58 |
| L4       | 153   | I3 and I2   | US-PGPUB;<br>USPAT | ADJ                 | ON      | 2005/12/23 13:58 |
| L5       | 120   | l4 and (multi-layer collagen layers)                  | US-PGPUB;<br>USPAT | ADJ                 | ON      | 2005/12/23 13:59 |
| L6       | 76    | I5 and @ad<"20020603"                                 | US-PGPUB;<br>USPAT | ADJ                 | ON      | 2005/12/23 13:59 |

\* \* \* \* STN Columbus

=> d his

L4

L5

L6

 $\Gamma8$ 

AΝ

(FILE 'HOME' ENTERED AT 17:16:37 ON 23 DEC 2005)

SET PLURALS ON

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, ANTE, AQUALINE, AQUASCI, BIOENG, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CAPLUS, CEABA-VTB, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DISSABS, DRUGB, DRUGMONOG2, DRUGU, EMBAL, EMBASE, ...' ENTERED AT 17:17:14 ON 23 DEC 2005

QUE COLLAGEN(S) WOUND(1A) HEAL? OR DRESS? L1 SEA F3-F12, F15-F18

FILE 'USPATFULL, CAPLUS, WPIDS, CABA, PASCAL, MEDLINE, JICST-EPLUS, SCISEARCH, BIOSIS, EMBASE, FSTA, AGRICOLA, USPAT2, FROSTI' ENTERED AT 17:21:39 ON 23 DEC 2005

210067 S L1 L2

16153 S L2 AND MATRIX L3

6427 S L3 AND (CROSSLINK? OR CROSS LINK?)

771 S L4 AND (MULTI-LAYER OR MULTI?(1W)LAYER?)

82 S L5 AND SPONGE(S)COLLAGEN

80 DUP REM L6 (2 DUPLICATES REMOVED) T.7

28 S L7 AND PY<2003

## => d bib abs 1-28

ANSWER 1 OF 28 USPATFULL on STN T.R

2004:205792 USPATFULL

Adipose-derived stem cells and lattices ΤІ

Katz, Adam J., Charlottesville, VA, United States IN

Llull, Ramon, Mallorca, SPAIN

Futrell, William J., Pittsburgh, PA, United States

Hedrick, Marc H., Encino, CA, United States Benhaim, Prosper, Los Angeles, CA, United States

Lorenz, Hermann Peter, Los Angeles, CA, United States Zhu, Min, Los Angeles, CA, United States

The Regents of the University of California, Oakland, CA, United States PA

<--

(U.S. corporation)

20040817 US 6777231 В1 PΙ

> 20000914 WO 2000053795

US 2001-936665 20010910 (9) AΙ

> WO 2000-US6232 20000310

19990310 (60) US 1999-123711P PRAI

19991029 (60) US 1999-162462P

DT Utility FS

GRANTED Primary Examiner: Yucel, Remy; Assistant Examiner: Sandals, William **EXNAM** 

Mandel & Adriano LREP

Number of Claims: 10 CLMN

Exemplary Claim: 1 ECL

0 Drawing Figure(s); 0 Drawing Page(s) DRWN

LN.CNT 1213

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention provides adipose-derived stem cells and lattices. AB In one aspect, the present invention provides a lipo-derived stem cell substantially free of adipocytes and red blood cells and clonal populations of connective tissue stem cells. The cells can be employed, alone or within biologically-compatible compositions, to generate differentiated tissues and structures, both in vivo and in vitro. Additionally, the cells can be expanded and cultured to produce hormones and to provide conditioned culture media for supporting the growth and expansion of other cell populations. In another aspect, the present invention provides a lipo-derived lattice substantially devoid of cells,

which includes extracellular \*\*\*matrix\*\*\* material from adipose tissue. The lattice can be used as a substrate to facilitate the growth and differentiation of cells, whether in vivo or in vitro, into anlagen

and differentiation of cells, whether in vivo or in vitro, into anlagen or even mature tissues or structures. CAS INDEXING IS AVAILABLE FOR THIS PATENT. ANSWER 2 OF 28 USPATFULL on STN 1.8 2004:174271 USPATFULL ΑN ТΙ Collagen preparation for the controlled release of active substances ΙN Roreger, Michael, Neuwied, GERMANY, FEDERAL REPUBLIC OF Lohmann & Rauscher GmbH & Co., KG, Rengsdorf, GERMANY, FEDERAL REPUBLIC PA OF (non-U.S. corporation) 20040713 PΙ US 6761908 В1 WO 9528964 19951102 <--US 1996-737111 19961025 (8) AΙ WO 1995-EP1428 19950415 PRAI DE 1994-4414755 19940427 DT Utility GRANTED FS Primary Examiner: Webman, Edward J. EXNAM Wenderoth, Lind & Ponack, L.L.P. LREP Number of Claims: 15 CLMN Exemplary Claim: 1 ECL DRWN 0 Drawing Figure(s); 0 Drawing Page(s) LN.CNT 727 CAS INDEXING IS AVAILABLE FOR THIS PATENT. A collagen preparation for the controlled release of active substances is characterized in that it has mixtures of acid-insoluble collagens with different molecular weight distributions. CAS INDEXING IS AVAILABLE FOR THIS PATENT. ANSWER 3 OF 28 USPATFULL on STN 1.8 2002:288564 USPATFULL ANDermal scaffold using alkaline pre-treated chitosan \*\*\*matrix\*\*\* ТΙ alkaline pre-treated chitosan and alkaline pre-treated collagen mixed \*\*\*matrix\*\*\* Son, Young-Sook, Seoul, KOREA, REPUBLIC OF ΤN Youn, Yong-Ha, Bupyung-ku, KOREA, REPUBLIC OF Hong, Seok-Il, Seoul, KOREA, REPUBLIC OF Lee, Seung-Hoon, Seoul, KOREA, REPUBLIC OF Gin, Yong-Jae, Seoul, KOREA, REPUBLIC OF Han, Kyu-Bo, Sungnam-si, KOREA, REPUBLIC OF Kim, Chun-Ho, Seoul, KOREA, REPUBLIC OF US 2002161440 Α1 20021031 <--PΙ US 6699287 20040302 В2 US 2002-132869 Α1 20020425 (10) ΑI Continuation-in-part of Ser. No. US 1999-399547, filed on 20 Sep 1999, RLI PENDING KR 1998-39576 19980924 PRAI Utility DΤ APPLICATION FS Peter F. Corless, Dike, Bronstein, Roberts & cushman, IP Group of, LREP EDWARDS & ANGELL, LLP, 130 Water Street, Boston, MA, 02109 CLMN Number of Claims: 12 ECL Exemplary Claim: 1 DRWN 17 Drawing Page(s)

LN.CNT 897 CAS INDEXING IS AVAILABLE FOR THIS PATENT. Disclosed are a dermal scaffold comprising alkaline pre-treated free AΒ amine-containing chitosan \*\*\*matrix\*\*\* , alkaline pre-treated free amine-containing chitosan and alkaline pre-treated \*\*\*collagen\*\*\* \*\*\*matrix\*\*\* , or alkaline pre-treated free amine-containing mixed chitosan and alkaline pre-treated \*\*\*collagen\*\*\* \*\*\*matrix\*\*\* containing chitosan fabrics, which has excellent \*\*\*wound\*\*\* \*\*\*healing\*\*\* effect by constituting microenvironments suitable for migration and proliferation of fibroblasts and vascular cells surrounding the wound to be extremely useful as \*\*\*wound\*\*\* \*\*\*healing\*\*\* \*\*\*dressings\*\*\* , and a bioartificial dermis comprising the dermal scaffold and human fibroblasts, particularly broad \*\*\*wound\*\*\* sites such as burns. useful for \*\*\*healing\*\*\*

```
ANSWER 4 OF 28 USPATFULL on STN
L8
       2002:279665 USPATFULL
AΝ
ΤI
       Rapid preparation of stem cell
                                        ***matrices*** for use in tissue and
       organ treatment and repair
       Chancellor, Michael B., Pittsburgh, PA, UNITED STATES Huard, Johnny, Wexford, PA, UNITED STATES
TN
       Capelli, Christopher, Kenosha, WI, UNITED STATES
       Chung, Steve, Pittsburgh, PA, UNITED STATES
       Sacks, Michael S., Pittsburgh, PA, UNITED STATES
PΙ
       US 2002155096
                          Α1
                               20021024
                                                                     <--
AΙ
       US 2002-81835
                         A1
                               20020222 (10)
PRAI
                          20010223 (60)
       US 2001-271267P
DT
       Utility
       APPLICATION
FS
       MORGAN & FINNEGAN, L.L.P., 345 Park Avenue, New York, NY, 10154-0053
LREP
       Number of Claims: 45
CLMN
       Exemplary Claim: 1
ECL
DRWN
       2 Drawing Page(s)
LN.CNT 1174
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       The present invention describes a rapid method for preparing stem cell
AΒ
                                        ***matrix*** compositions for use in
       and physiologically acceptable
       tissue and organ repair. Compared with previous tissue engineering
       materials, the stem cell- ***matrix***
                                                compositions of the present
       invention do not require long-term incubation or cultivation in vitro
       prior to use in in vivo applications. The stem cells can be from
       numerous sources and may be homogeneous, heterogeneous, autologous,
                                  ***matrix***
                                                 material. The stem cell-
       and/or allogeneic in the
         ***matrix***
                       compositions as described provide point of service
       utility for the practitioner, wherein the stem cells and
       can be combined not long before use, thereby alleviating costly and
       lengthy manufacturing procedures. In addition, the stem cells offer
       unique structural properties to the ***matrix***
                                                            composition which
       improves outcome and healing after use. Use of stem cells obtained from
                                            ***matrix*** composition.
       muscle affords contractility to the
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L8
     ANSWER 5 OF 28
                    USPATFULL on STN
       2002:254071 USPATFULL
ΑN
       Medicaments based on polymers composed of methacrylamide-modified
ΤI
ΙN
       Schacht, Etienne, Staden, BELGIUM
       Van Den Bulcke, An, Ghent, BELGIUM
       Delaey, Bernard, Zingem, BELGIUM
       Draye, Jean-Pierre, Chaste, BELGIUM
       Innogenetics N.V., Ghent, BELGIUM (non-U.S. corporation)
PA
                                                                     <--
PΙ
                          В1
                               20021001
       US 6458386
                   19981210
                                                                     <---
       WO 9855161
       US 2000-424432
                               20000128 (9)
AΙ
       WO 1998-EP3320
                               19980603
       EP 1997-870083
                           19970603
PRAI
DT
       Utility
FS
       GRANTED
EXNAM
       Primary Examiner: Page, Thurman K.; Assistant Examiner: Channavajjala,
LREP
       Howrey Simon Arnold & White, LLP
CLMN
       Number of Claims: 21
       Exemplary Claim: 1
ECL
       16 Drawing Figure(s); 14 Drawing Page(s)
DRWN
LN.CNT 1390
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       The present invention relates to a composition comprising a biopolymer
AB
         ***matrix*** comprising ***cross*** - ***linked***
       vinyl-derivatives of gelatin, or co-polymerized methacrylamide modified
       gelatin with vinyl-modified polysaccharides, or
                                                          ***cross***
         ***linked***
                        vinyl-substituted polysaccharide and gelatin being
       physically entrapped in a semi-interpenetrating network. Preferably said
       polysaccharide comprises dextran or xanthan. The present invention also
                          ***dressing*** or a controlled release device
       relates to a wound
                                   ***matrix*** . Preferably said
       comprising said biopolymer
                       is in the form of a hydrated film, a hydrated or dry
         ***matrix***
       foam, dry fibers which may be fabricated into a woven or non-woven
       tissue, hydrated or dry microbeads, dry powder, or covered with a
```

semipermeable film so as to control the humidity of the wound covered

with the \*\*\*dressing\*\*\* , with the permeability chosen so as to maintain this humidity within a therapeutically optimal window.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 6 OF 28 USPATFULL on STN

L8

ECL

DRWN

LN.CNT 1209

Exemplary Claim: 1

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

No Drawings

```
2002:246177 USPATFULL
ΑN
       Composites for tissue regeneration and methods of manufacture thereof
TΙ
       Sherwood, Jill K., Princeton, NJ, United States
ΤN
       Griffith, Linda G., Cambridge, MA, United States
       Brown, Scott, Princeton, NJ, United States
       Massachusetts Institute of Technology, Cambridge, MA, United States
PA
       (U.S. corporation)
       Therics, Inc., Princeton, NJ, United States (U.S. corporation)
                                20020924
PΤ
       US 6454811
                          В1
       US 1999-416346
                                 19991012 (9)
AΙ
PRAI
       US 1998-103853P
                            19981012 (60)
DT
       Utility
       GRANTED
FS
       Primary Examiner: McDermott, Corrine; Assistant Examiner: Stewart, Alvin
EXNAM
LREP
       Holland & Knight LLP
CLMN
       Number of Claims: 62
       Exemplary Claim: 1
ECL
DRWN
       24 Drawing Figure(s); 4 Drawing Page(s)
LN.CNT 2036
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       Composite devices for tissue engineering are provided having a gradient
       of one or more of the following: materials, macroarchitecture,
       microarchitecture, or mechanical properties, which can be used to select
       or promote attachment of specific cell types on and in the devices prior
       to and/or after implantation. In various embodiments, the gradient forms
       a transition zone in the device from a region composed of materials or
       having properties best suited for one type of tissue to a region
       composed of materials or having properties suited for a different type of tissue. The devices are made in a continuous process that imparts
       structural integrity as well as a unique gradient of materials in the
       architecture. The gradient may relate to the materials, the
       macroarchitecture, the microarchitecture, the mechanical properties of the device, or several of these together. The devices disclosed herein
       typically are made using solid free form processes, especially
       three-dimensional printing process (3DP.TM.). The device can be
       manufactured in a single continuous process such that the transition
       from one form of tissue regeneration scaffold and the other form of
       tissue regeneration scaffold have no "seams" and are not subject to
       differential swelling along an axis once the device is implanted into
       physiological fluid.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
rs
     ANSWER 7 OF 28 USPATFULL on STN
       2002:148263 USPATFULL
ΑN
ΤI
       Adipose-derived stem cells and lattices
       Katz, Adam J., Charlottesville, VA, UNITED STATES
IN
       Llull, Ramon, Mallorca, SPAIN
       Futrell, J. William, Pittsburgh, PA, UNITED STATES
       Hedrick, Marc H., Encino, CA, UNITED STATES
       Benhaim, Prosper, Los Angeles, CA, UNITED STATES
       Lorenz, Hermann Peter, Los Angeles, CA, UNITED STATES
       Zhu, Min, Los Angeles, CA, UNITED STATES
PΑ
       University of Pittsburgh of the Commonwealth System of Higher Education,
       Pittsburgh, PA (U.S. corporation)
PΙ
       US 2002076400
                           A1
                                 20020620
                                                                        <--
AΙ
       US 2001-947985
                           Α1
                                 20010906 (9)
       Continuation of Ser. No. WO 2000-US6232, filed on 10 Mar 2000, UNKNOWN
RLI
                           19990310 (60)
       US 1999-123711P
PRAI
       US 1999-162462P
                            19991029 (60)
DT
       Utility
       APPLICATION
FS
       LEYDIG VOIT & MAYER, LTD, TWO PRUDENTIAL PLAZA, SUITE 4900, 180 NORTH
LREP
       STETSON AVENUE, CHICAGO, IL, 60601-6780
CLMN
       Number of Claims: 59
```

The present invention provides adipose-derived stem cells and lattices. In one aspect, the present invention provides a lipo-derived stem cell substantially free of adipocytes and red blood cells and clonal populations of connective tissue stem cells. The invention also provides a method of isolating stem cells from adipose tissues. The cells can be employed, alone or within biologically-compatible compositions, to generate differentiated tissues and structures, both in vivo and in vitro. Additionally, the cells can be expanded and cultured to produce hormones and to provide conditioned culture media for supporting the growth and expansion of other cell populations. In another aspect, the present invention provides a lipo-derived lattice substantially devoid of cells, which includes extracellular \*\*\*matrix\*\*\* material from adipose tissue. The lattice can be used as a substrate to facilitate the growth and differentiation of cells, whether in vivo or in vitro, into

```
anlagen or even mature tissues or structures.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
    ANSWER 8 OF 28 USPATFULL on STN
L8
       2002:81274 USPATFULL
ΑN
       Methods of making conditioned cell culture medium compositions
ΤI
       Naughton, Gail K., La Jolla, CA, United States
ΤN
       Mansbridge, Jonathan N., La Jolla, CA, United States
       Pinney, R. Emmett, Poway, CA, United States
PA
       Advanced Tissue Sciences, Inc., La Jolla, CA, United States (U.S.
       corporation)
                                                                     <---
                               20020416
PI
       US 6372494
                          В1
       US 1999-313538
                               19990514 (9)
AΙ
DT
       Utility
FS
       GRANTED
       Primary Examiner: Spector, Lorraine; Assistant Examiner: O'Hara, Eileen
EXNAM
       Pennie & Edmonds LLP
LREP
       Number of Claims: 11
CLMN
       Exemplary Claim: 1
ECL
       0 Drawing Figure(s); 0 Drawing Page(s)
DRWN
LN.CNT 2008
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       Novel products comprising conditioned cell culture medium compositions
AΒ
       and methods of use are described. The conditioned cell medium
       compositions of the invention may be comprised of any known defined or
       undefined medium and may be conditioned using any eukaryotic cell type.
       The medium may be conditioned by stromal cells, parenchymal cells,
       mesenchymal stem cells, liver reserve cells, neural stem cells,
       pancreatic stem cells and/or embryonic stem cells. Additionally, the
       cells may be genetically modified. A three-dimensional tissue construct
       is preferred. Once the cell medium of the invention is conditioned, it
       may be used in any state. Physical embodiments of the conditioned medium
       include, but are not limited to, liquid or solid, frozen, lyophilized or
       dried into a powder. Additionally, the medium is formulated with a
       pharmaceutically acceptable carrier as a vehicle for internal
       administration, applied directly to a food item or product, formulated
```

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 9 OF 28 USPATFULL on STN

within the medium.

2002:67498 USPATFULL

L8

ΑN

```
Compositions and methods for production and use of an injectable
ΤI
        naturally secreted extracellular ***matrix***
        Naughton, Gail K., La Jolla, CA, UNITED STATES
ΙN
        Advanced Tissue Sciences, Inc. (U.S. corporation)
PΑ
                                    20020328
PΙ
        US 2002038152
                              Α1
                                    20010907 (9)
        US 2001-948379
                              Α1
AΙ
        Continuation of Ser. No. US 1996-660787, filed on 6 Jun 1996, PENDING Continuation-in-part of Ser. No. US 1995-470101, filed on 6 Jun 1995,
RLI
        GRANTED, Pat. No. US 5830708
DT
        Utility
FS
        APPLICATION
        PENNIE AND EDMONDS, 1155 AVENUE OF THE AMERICAS, NEW YORK, NY, 100362711
LREP
        Number of Claims: 29
CLMN
```

into or added to surgical glue to accelerate healing of sutures

with a salve or ointment for topical applications, or, for example, made

following invasive procedures. Also, the medium may be further processed to concentrate or reduce one or more factors or components contained

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ECL
       Exemplary Claim: 1
       5 Drawing Page(s)
DRWN
LN.CNT 1292
       The present invention discloses compositions containing natural human
AB
                      ***matrices***
                                       and methods for the use thereof. More
       extracellular
       particularly, the present invention provides compositions and methods
       for the repair of skin defects using natural human extracellular
         ***matrix***
                       by injection.
     ANSWER 10 OF 28 USPATFULL on STN
rs
```

2002:43554 USPATFULL ΑN ΤI Composition and method for growing, protecting, and healing tissues and cells Petito, George D., Bethlehem, PA, UNITED STATES ΤN Petito, Anita M., Bethlehem, PA, UNITED STATES PΤ US 2002025921 Α1 20020228 <--AΙ US 2001-983274 Α1 20011023 (9) Continuation-in-part of Ser. No. US 1999-360169, filed on 26 Jul 1999, RLI UNKNOWN DT Utility APPLICATION FS LREP Richard C. Litman, LITMAN LAW OFFICES, LTD., P.O. Box 15035, Arlington, CLMN Number of Claims: 21 ECL Exemplary Claim: 1 No Drawings DRWN LN.CNT 1216 CAS INDEXING IS AVAILABLE FOR THIS PATENT. A composition and method for facilitating the growth, protection and AB

healing of tissues and cells in animals and humans. Formulated as a either a powder, gel, paste, film, fluid injectable, rehydratable \*\*\*sponge\*\*\* , sprayable solution, topically freeze-dried paste or applied patch with adhesive and reservoir system, an intermediate for coatables such as films and bandages, a \*\*\*matrix\*\*\* for membranes, \*\*\*matrix\*\*\* of flexible polymer(s), or delivered as either an orally ingestible liquid, tablet or capsule. The main ingredients are hydrolyzed Type I \*\*\*collagen\*\*\* having a molecular weight of 1,000-10,000, polysulfated glycosaminoglycans, a hyaluronic acid salt, a glucosamine salt, and optionally, a chelated manganese ascorbate and L-malic acid. In the topical form, the composition is administered to the cleaned wound site where it absorbs exudate, provides a physical barrier to bacterial infestation, reduces pain, and expedites \*\*\*healing\*\*\* by having chemotactic, hemostatic, \*\*\*wound\*\*\* bacteriostatic, and other therapeutic benefits. Scars are advantageously

## CAS INDEXING IS AVAILABLE FOR THIS PATENT.

\*\*\*matrix\*\*\*

ANSWER 11 OF 28 USPATFULL on STN

reduced.

L8

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2002:32517 USPATFULL
ΑN
       Compositions and methods for production and use of an injectable
ΤI
       naturally secreted extracellular ***matrix***
       Naughton, Gail K., LaJolla, CA, UNITED STATES
ΙN
       Advanced Tissue Sciences, Inc. (U.S. corporation)
PA
       US 2002019339
                            Α1
                                  20020214
                                                                           <--
PΤ
AΙ
       US 2001-947131
                            Α1
                                  20010904 (9)
       Continuation of Ser. No. US 1998-182822, filed on 29 Oct 1998, GRANTED, Pat. No. US 6284284 Division of Ser. No. US 1996-660787, filed on 6 Jun
RLI
       1996, PENDING Continuation-in-part of Ser. No. US 1995-470101, filed on
       6 Jun 1995, GRANTED, Pat. No. US 5830708
DT
       Utility
FS
       APPLICATION
       PENNIE AND EDMONDS, 1155 AVENUE OF THE AMERICAS, NEW YORK, NY, 100362711
LREP
CLMN
       Number of Claims: 29
ECL
       Exemplary Claim: 1
DRWN
       5 Drawing Page(s)
LN.CNT 1286
AB
       The present invention discloses compositions containing natural human
       extracellular ***matrices*** and methods for the use thereof. More
       particularly, the present invention provides compositions and methods
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for the repair of skin defects using natural human extracellular

by injection.

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ANSWER 12 OF 28
                     USPATFULL on STN
\Gamma8
       2001:147502 USPATFULL
AN
TΙ
       Compositions and methods for production and use of an injectable
       naturally secreted extracellular ***matrix***
       Naughton, Gail K., La Jolla, CA, United States
TN
       Advanced Tissue Sciences, Inc., La Jolla, CA, United States (U.S.
PA
       corporation)
                                20010904
                                                                       <--
       US 6284284
                           В1
PΙ
                                19981029 (9)
       US 1998-182822
AΙ
       Division of Ser. No. US 1996-660787, filed on 6 Jun 1996
RLI
       Continuation-in-part of Ser. No. US 1995-470101, filed on 6 Jun 1995,
       now patented, Pat. No. US 5830708
DT
       Utility
       GRANTED
FS
       Primary Examiner: Chan, Christina Y.; Assistant Examiner: Clemens, Karen
EXNAM
       Pennie & Edmonds LLP
LREP
       Number of Claims: 16
CLMN
ECT.
       Exemplary Claim: 1
       5 Drawing Figure(s); 5 Drawing Page(s)
DRWN
LN.CNT 1224
       The present invention discloses compositions containing natural human
AB
       extracellular ***matrices*** and methods for the use thereof. More
       particularly, the present invention provides compositions and methods
       for the repair of skin defects using natural human extracellular
         ***matrix***
                        by injection.
     ANSWER 13 OF 28 USPATFULL on STN
L8
ΑN
       2000:137849 USPATFULL
                                          ***cross*** - ***linked***
       Medicaments containing gelatin
ΤI
       oxidized polysaccharides
       Schacht, Etienne, Staden, Belgium
TN
       Draye, Jean Pierre, Chaste, Belgium
       Delaey, Bernard, Zingem, Belgium
       Innogenetics N.V., Belgium (non-U.S. corporation)
PA
                                                                       <--
                                20001017
       US 6132759
PΙ
       WO 9741899
                   19971113
       US 1998-180057
                                19981027 (9)
AΙ
       WO 1997-EP2279
                                19970505
                                19981027
                                           PCT 371 date
                                          PCT 102(e) date
                                19981027
                            19960503
PRAI
       EP 1996-870059
\mathsf{DT}
       Utility
FS
       Granted
       Primary Examiner: Kulkosky, Peter F.
EXNAM
       Bierman, Muserlian and Lucas
LREP
       Number of Claims: 17
CLMN
       Exemplary Claim: 1
ECL
       26 Drawing Figure(s); 15 Drawing Page(s)
DRWN
LN.CNT 1841
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       The present invention relates to a wound ***dressing***
                                                                     comprising a
AB
                                                          ***cross***
                    ***matrix***
                                    comprising gelatin
       biopolymer
                         with an oxidized polysaccharide. Preferably said oxidized
         ***linked***
       polysaccharide comprises an oxidized dextran or an oxidized xanthan.
                          ***matrix*** is in the form of a hydrated film, a
       Preferably said
       hydrated or dry foam, dry fibers which may be fabricated into a woven or
       non-woven tissue, hydrated or dry microbeads, dry powder; or said ***matrix*** is covered with a semipermeable film, so as to control
                                                     ***dressing***
       the humidity of the wound covered with the
                                                                       , with the
       permeability chosen so as to maintain this humidity within a
       therapeutically optimal window. A polysulfated polysaccharide with a
       M.W. greater than 30,000 kDa is mechanically entrapped during the
       formation of said
                            ***matrix***
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 14 OF 28 USPATFULL on STN
rs
       2000:34737 USPATFULL
ΑN
       Bioreactor wound ***dressing***
ΤI
       Cooke, Randolph L., East Amwell Township, Hunterdon County, NJ, United
TN
       States
```

Stoy, Vladimir A., Princeton Township, Mercer County, NJ, United States

Replication Medical, Inc., Rocky Hill, NJ, United States (U.S.

PA

corporation)

```
20000321
PΙ
       US 6040493
                                                                     <--
                               19980424 (9)
ΑI
       US 1998-66146
DT
       Utility
FS
       Granted
       Primary Examiner: Weiss, John G.; Assistant Examiner: Hart, Kelvin
EXNAM
LREP
       Glynn, Esq., Kenneth P.
       Number of Claims: 13
CLMN
       Exemplary Claim: 1
ECL
       6 Drawing Figure(s); 3 Drawing Page(s)
DRWN
LN.CNT 1173
       The present invention is a bioreactor wound
                                                     ***dressing***
       includes a first layer, being a transport layer, in direct contact with
       a wound. It includes at least one layer of a permeable polymeric media
       containing, in equilibrium with body fluids, at least 40% by weight of
       liquid, and is impermeable for infectious agents of any kind and being
       permeable to water soluble substances having molecular weight up to at
       least 1000 Daltons. There is a second layer, being a fluid reservoir
       layer that is adjacent to the transport layer and is capable of
       containing between 40% and 100% of its volume of an aqueous liquid,
       wherein the transport layer and reservoir layer are permeably
       interconnected for aqueous solutions and are in a substantial osmotic
       equilibrium. The invention also includes a method of wound treatment
       utilizing the bioreactor wound ***dressing***
rs
     ANSWER 15 OF 28 USPATFULL on STN
ΑN
       1999:36949 USPATFULL
TT
       Engineering oral tissues
ΙN
       Mooney, David J., Ann Arbor, MI, United States
       Rutherford, Robert B., Ann Arbor, MI, United States
PA
       The Regents of the University of Michigan, Ann Arbor, MI, United States
       (U.S. corporation)
РΙ
       US 5885829
                               19990323
                                                                     <--
                               19970528 (8)
ΑI
       US 1997-864494
       US 1996-18450P
                          19960528 (60)
PRAI
DΤ
       Utility
FS
       Granted
EXNAM
      Primary Examiner: Degen, Nancy
LREP
       Arnold, White & Durkee
       Number of Claims: 109
CLMN
ECL
       Exemplary Claim: 1
DRWN
       17 Drawing Figure(s); 11 Drawing Page(s)
LN.CNT 8001
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB
       Disclosed are methods for regenerating dental and oral tissues from
       viable cells using ex vivo culture on a structural
                                                           ***matrix***
                                                            preparations thus
       regenerated oral tissues and tissue- ***matrix***
       provided have both clinical applications in dentistry and oral medicine
       and are also useful in in vitro toxicity and biocompatibility testing.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L8
     ANSWER 16 OF 28 USPATFULL on STN
ΑN
       1998:134859 USPATFULL
TI
       Methods for production of a naturally secreted extracellular
         ***matrix***
ΤN
       Naughton, Gail K., La Jolla, CA, United States
PA
       Advanced Tissue Sciences, Inc., Lajolla, CA, United States (U.S.
       corporation)
PΙ
       US 5830708
                               19981103
                                                                     <--
       US 1995-470101
                               19950606 (8)
ΑI
DT
       Utility
FS
       Granted
EXNAM
       Primary Examiner: Naff, David M.; Assistant Examiner: Kerr, Janet M.
       Pennie & Edmonds LLP
LREP
CLMN
       Number of Claims: 10
ECL
       Exemplary Claim: 1
DRWN
       1 Drawing Figure(s); 1 Drawing Page(s)
LN.CNT 1060
AB
       The present invention is directed to methods for producing naturally
```

\*\*\*matrix\*\*\*

stromal cells on a biocompatible three-dimensional framework in vitro.

\*\*\*matrix\*\*\*

material and compositions

onto the

material. The method

\*\*\*matrix\*\*\* -secreting human

\*\*\*matrix\*\*\*

secreted human extracellular

containing the extracellular

includes culturing extracellular

After secretion of the extracellular

framework, the stromal cells are killed and the cells and cellular contents are removed from the framework. The extracellular \*\*\*matrix\*\*\* material deposited on the framework is collected and further processed to obtain a physiologically acceptable compositions. The compositions of the present invention are useful for the repair of soft tissue and skin defects, including wrinkles and scars.

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ANSWER 17 OF 28 USPATFULL on STN
L8
ΑN
       95:45591 USPATFULL
          ***Multi*** - ***layered***
ΤТ
                                           collagen film compositions for
       delivery of proteins and methods of using same
       Song, Suk-Zu, Moorpark, CA, United States
IN
       Morawiecki, Andrew, Camarillo, CA, United States
       Pierce, Glenn F., Thousand Oaks, CA, United States
       Pitt, Colin G., Westlake Village, CA, United States
       Amgen Inc., Thousand Oaks, CA, United States (U.S. corporation)
PΑ
                                  19950523
PΙ
       US 5418222
AΙ
       US 1994-267647
                                  19940628 (8)
       Continuation of Ser. No. US 1991-716862, filed on 18 Jun 1991, now
RLI
       abandoned which is a continuation-in-part of Ser. No. US 1991-715165,
       filed on 14 Jun 1991, now abandoned
DT
       Utility
FS
       Granted
EXNAM
       Primary Examiner: Wityshyn, Michael G.; Assistant Examiner:
       Gromet-Degen, Nancy J.
LREP
       Chambers, Daniel M., Curry, Daniel R.
       Number of Claims: 45
CLMN
ECL
       Exemplary Claim: 1
       9 Drawing Figure(s); 9 Drawing Page(s)
DRWN
LN.CNT 887
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       The present invention relates to single and ***multiple***
AB
          ***layer*** collagen films that are useful for improved sustained
       release delivery of pharmaceuticals.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L8
     ANSWER 18 OF 28 USPATFULL on STN
       93:56711
                 USPATFULL
ΑN
       Method of treating a wound
TΙ
       Chvapil, Milos, 77 Duck Hill Rd., Tucson, AZ, United States Barber, Bruce, 77 Duck Hill Rd., Duxbury, MA, United States
ΙN
                                                                          02331
       Barber, Bruce, Duxbury, MA, United States (U.S. individual)
PA
                                  19930713
       US 5227168
PΙ
AΙ
       US 1992-887357
                                  19920521 (7)
       Division of Ser. No. US 1991-742319, filed on 8 Aug 1991, now patented, Pat. No. US 5116620 which is a division of Ser. No. US 1989-439472,
RLI
       filed on 21 Nov 1989, now patented, Pat. No. US 5104660
\mathsf{DT}
       Utility
FS
       Granted
       Primary Examiner: Page, Thurman K.; Assistant Examiner: Horne, Leon R.
EXNAM
LREP
       Crowley, Richard P.
       Number of Claims: 8
CLMN
ECL
       Exemplary Claim: 1
       1 Drawing Figure(s); 1 Drawing Page(s)
DRWN
LN.CNT 417
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       An antimicrobial wound ***dressing*** and method of wo
the wound ***dressing*** having a layer of a collagen
                                                     and method of wound treatment,
AB
          ***dressing*** material impregnated with lyophilized, stabilized
       chlorine-containing compounds which generate on activation chlorine
       dioxide, like a mixture of sodium chlorate and sodium chlorite, and an
       adjacent layer secured thereto containing a dry, activating amount of an
       acidic compound, such as citric acid, whereby moisture from the wound
       activates the dry chlorine moiety to treat the wound.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
L8
     ANSWER 19 OF 28 USPATFULL on STN
ΑN
        93:48236 USPATFULL
                                                ***healing***
                                                                    ***matrices***
          ***Collagen***
                              ***wound***
```

ΤI

ΙN

and process for their production

Chu, George H., Sunnyvale, CA, United States

Ogawa, Yasushi, Pacifica, CA, United States

```
McPherson, John M., Hopkinton, MA, United States
Ksander, George, Redwood City, CA, United States
Pratt, Bruce, Union City, CA, United States
       Hendricks, Diana, Brea, CA, United States
       McMullin, Hugh, San Bruno, CA, United States
       Collagen Corporation, Palo Alto, CA, United States (U.S. corporation)
PΑ
                                  19930615
PΙ
       US 5219576
       US 1991-801732
                                  19911203 (7)
ΑI
       20070821
DCD
       Division of Ser. No. US 1990-630299, filed on 19 Dec 1990, now patented,
RLT
       Pat. No. US 5110604 which is a division of Ser. No. US 1988-213726,
       filed on 30 Jun 1988, now patented, Pat. No. US 5024841
DT
FS
       Granted
       Primary Examiner: Page, Thurman K.; Assistant Examiner: Kishore, G. S.
EXNAM
       Morrison & Foerster
LREP
       Number of Claims: 4
CLMN
ECL
       Exemplary Claim: 1
        2 Drawing Figure(s); 2 Drawing Page(s)
DRWN
LN.CNT 714
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
          ***Collagen*** implants that are useful as
                                                              ***wound***
AB
          ***healing***
                             ***matrices*** are characterized by being formed of
          ***collagen***
                                                                  ***cross***
                           fibrils that are not chemically
          ***linked*** , and having a bulk density of 0.01 to 0.3 g/cm.sup.3 and
       a pore population in which at least about 80% of the pores have an
       average pore size of 35 to 250 microns. The implants are capable of
       promoting connective tissue deposition, angiogenesis,
       reepithelialization, and fibroplasia. The ***wound***

***healing*** ***matrix*** also serves as an ef
                                              also serves as an effective sustained
       delivery system for bioactive agents.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 20 OF 28 USPATFULL on STN
L8
ΑN
        92:42546 USPATFULL
                               ***dressing***
       Antimicrobial wound
ΤI
       Chvapil, Milos, 77 Duck Hill Rd., Tucson, AZ, United States
Barber, Bruce A., 77 Duck Hill Rd., Duxbury, MA, United States 02331
ΙN
       Barber, Bruce A., Duxbury, MA, United States (U.S. individual)
PA
                                  19920526
PΙ
       US 5116620
       US 1991-742319
                                  19910808 (7)
ΑI
RLI
        Division of Ser. No. US 1989-439472, filed on 21 Nov 1989
\mathsf{DT}
       Utility
FS
       Granted
       Primary Examiner: Page, Thurman K.; Assistant Examiner: Piccone, Louis
EXNAM
       Α.
LREP
        Crowley, Richard P.
        Number of Claims: 15
CLMN
ECL
        Exemplary Claim: 1
        1 Drawing Figure(s); 1 Drawing Page(s)
DRWN
LN.CNT 456
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
                                   ***dressing***
                                                      and method of wound treatment,
AB
        An antimicrobial wound
                     ***dressing***
                                       having a layer of a collagen
        the wound
          ***dressing*** material impregnated with lyophilized, stabilized
        chlorine-containing compounds which generate on activation chlorine
        dioxide, like a mixture of sodium chlorate and sodium chlorite, and an
        adjacent layer secured thereto containing a dry, activating amount of an
        acidic compound, such as citric acid, whereby moisture from the wound
        activates the dry chlorine moiety to treat the wound.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 21 OF 28 USPATFULL on STN
T.8
        92:35989 USPATFULL
ΑN
ΤI
        Processes for producing collagen
                                              ***matrixes***
                                                                 and methods of using
        Chu, George H., Sunnyvale, CA, United States
IN
        Ogawa, Yasushi, Pacifica, CA, United States
        McPherson, John M., Framingham, MA, United States
       Ksander, George, Redwood City, CA, United States
Pratt, Bruce, Union City, CA, United States
```

Hendricks, Diana, Brea, CA, United States McMullin, Hugh, San Bruno, CA, United States

```
US 1990-630299
ΑI
                                19901219 (7)
       Division of Ser. No. US 1988-213726, filed on 30 Jun 1988, now patented,
RLI
       Pat. No. US 5024841
DT
       Utility
FS
       Granted
       Primary Examiner: Page, Thurman K.; Assistant Examiner: Kishore, G. S.
EXNAM
       Morrison & Foerster
LREP
       Number of Claims: 4
CLMN
ECL
       Exemplary Claim: 1
       2 Drawing Figure(s); 2 Drawing Page(s)
DRWN
LN.CNT 711
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
         ***Collagen*** implants that are useful as
                                                          ***wound***
AB
         ***healing***
                           ***matrices*** are characterized by being formed of
         ***collagen*** fibrils that are not chemically ***cross***
         ***linked*** , and having a bulk density of 0.01 to 0.3 g/cm.sup.3 and
       a pore population in which at least about 80% of the pores have an
       average pore size of 35 to 250 microns. The implants are capable of promoting connective tissue deposition, angiogenesis,
                                                    ***wound***
       reepithelialization, and fibroplasia. The
         delivery system for bioactive agents.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 22 OF 28 USPATFULL on STN
rs
       92:29477 USPATFULL
AN
       Method of preparing an antimicrobial wound ***dressing***
TТ
       Chvapil, Milos, 77 Duck Hill Rd., Tucson, AZ, United States
Barber, Bruce, 77 Duck Hill Rd., Duxbury, MA, United States 02331
Barber, Bruce A., Duxbury, MA, United States (U.S. individual)
ΙN
PA
                                19920414
PI
       US 5104660
                                19891121 (7)
AΙ
       US 1989-439472
DT
       Utility
FS
       Granted
       Primary Examiner: Page, Thurman K.; Assistant Examiner: Piccone, Louis
EXNAM
LREP
       Crowley, Richard P.
       Number of Claims: 18
CLMN
ECL
       Exemplary Claim: 1
DRWN
       1 Drawing Figure(s); 1 Drawing Page(s)
LN.CNT 483
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       An antimicrobial wound ***dressing***
                                                  and method of wound treatment,
AB
       the wound ***dressing*** having a layer of a collagen
         ***dressing*** material impregnated with lyophilized, stabilized
       chlorine-containing compounds which generate on activation chlorine
       dioxide, like a mixture of sodium chlorate and sodium chlorite, and an
       adjacent layer secured thereto containing a dry, activating amount of an
       acidic compound, such as citric acid, whereby moisture from the wound
       activates the dry chlorine moiety to treat the wound.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 23 OF 28 USPATFULL on STN
1.8
       91:50153 USPATFULL
AN
                                         , semi-permeable conduit for nerve
         ***Multi*** - ***layered***
TΙ
       regeneration comprised of type 1 collagen, its method of manufacture and
       a method of nerve regeneration using said conduit
       Li, Shu-Tung, Oakland, NJ, United States
ΙN
       Colla-Tec, Incorporated, Plainsboro, NJ, United States (U.S.
PA
       corporation)
                                 19910625
PI
       US 5026381
       US 1990-561736
                                 19900801 (7)
AΙ
       Division of Ser. No. US 1989-341572, filed on 20 Apr 1989, now patented,
RLI
       Pat. No. US 4963146
DT
       Utility
FS
       Granted
       Primary Examiner: Pellegrino, Stephen C.; Assistant Examiner: Jackson,
EXNAM
       Gary
CLMN
       Number of Claims: 2
```

Collagen Corporation, Palo Alto, CA, United States (U.S. corporation)

19920505

PA

PΤ

US 5110604

Exemplary Claim: 1

2 Drawing Figure(s); 2 Drawing Page(s)

ECL

DRWN

```
comprised of Type I collagen and are characterized by having a
  ***multi*** - ***layered*** , semi-permeable structure, which
       conduits are used to promote nerve regeneration across a gap of a
       severed nerve. Methods of making the nerve regeneration conduit are also
       disclosed.
L8
     ANSWER 24 OF 28 USPATFULL on STN
ΑN
       91:48454
                 USPATFULL
                              ***wound***
                                              ***healing***
                                                                  ***matrices***
         ***Collagen***
TΙ
       and process for their production
       Chu, George H., Sunnyvale, CA, United States
IN
       Ogawa, Yasushi, Pacifica, CA, United States
       McPherson, John M., Hopkinton, MA, United States
       Ksander, George, Redwood City, CA, United States
Pratt, Bruce, Union City, CA, United States
       Hendricks, Diana, Brea, CA, United States
       McMullin, Hugh, San Bruno, CA, United States
       Collagen Corporation, Palo Alto, CA, United States (U.S. corporation)
PΑ
                                 19910618
PI
       US 5024841
       US 1988-213726
                                 19880630 (7)
AΙ
DCD
       20070821
DT
       Utility
FS
       Granted
       Primary Examiner: Page, Thurman K.; Assistant Examiner: Kishore, G. S.
EXNAM
       Irell & Manella
LREP
CLMN
       Number of Claims: 18
       Exemplary Claim: 1
ECL
       2 Drawing Figure(s); 2 Drawing Page(s)
DRWN
LN.CNT 759
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
                         implants that are useful as
                                                           ***wound***
          ***Collagen***
          ***healing***
                            ***matrices*** are characterized by being formed of
                                                                ***cross***
          ***collagen***
                         fibrils that are not chemically
          ***linked*** , and having a bulk density of 0.01 to 0.3 g/cm.sup.3 and
       a pore population in which at least about 80% of the pores have an
       average pore size of 35 to 250 microns. The implants are capable of
       promoting connective tissue deposition, angiogenesis,
       reepithelialization, and fibroplasia. The ***wound***

***healing*** ***matrix*** also serves as an ef
                                           also serves as an effective sustained
       delivery system for bioactive agents.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     ANSWER 25 OF 28 USPATFULL on STN
L8
       90:79476 USPATFULL
ΑN
         ***Multi***
                      - ***layered*** , semi-permeable conduit for nerve
ТΙ
       regeneration
       Li, Shu-Tung, Oakland, NJ, United States
ΙN
       Colla-Tec Incorporated, Plainsboro, NJ, United States (U.S. corporation)
PA
PΙ
       US 4963146
                                 19901016
       US 1989-341572
                                 19890420 (7)
AΙ
DT
       Utility
FS
       Granted
       Primary Examiner: Green, Randall L.; Assistant Examiner: Jackson, Gary
EXNAM
CLMN
       Number of Claims: 48
       Exemplary Claim: 1
ECL
DRWN
       2 Drawing Figure(s); 2 Drawing Page(s)
LN.CNT 1180
       The present invention is directed to hollow conduits whose walls are
AΒ
       comprised of Type I collagen and are characterized by having a
          ***multi*** - ***layered*** , semi-permeable structure, which
       conduits are used to promote nerve regeneration across a gap of a
       severed nerve. Methods of making the nerve regeneration conduit are also
       disclosed.
L8
     ANSWER 26 OF 28 USPATFULL on STN
                 USPATFULL
ΑN
       90:38497
       Biocompatible synthetic and collagen compositions having a dual-type
ΤI
       porosity for treatment of wounds and pressure ulcers and therapeutic
       methods thereof
       Silver, Frederick H., Bangor, PA, United States
```

The present invention is directed to hollow conduits whose walls are

LN.CNT 1034

AB

IN

Berg, Richard A., Lambertville, NJ, United States Doillon, charles J., Edison, NJ, United States Chernomorsky, Arkady, Elizabeth, NJ, United States Olson, Robert M., Princeton, NJ, United States University of Medicine and Dentistry of New Jersey, Newark, NJ, United PA States (U.S. corporation) US 4925924 19900515 PIUS 1987-113547 19871026 (7) AΙ Continuation-in-part of Ser. No. US 1986-843828, filed on 26 Mar 1986, RLI now patented, Pat. No. US 4703108, issued on 27 Oct 1987 which is a continuation-in-part of Ser. No. US 1984-593733, filed on 27 Mar 1984, now abandoned DTUtility FS Granted Primary Examiner: Kight, John; Assistant Examiner: Nutter, Nathan M. EXNAM Weiser & Stapler LREP CLMN Number of Claims: 23 ECL Exemplary Claim: 1 8 Drawing Figure(s); 4 Drawing Page(s) DRWN LN.CNT 1273 CAS INDEXING IS AVAILABLE FOR THIS PATENT. A therapeutic method for treating pressure ulcers like decubitus ulcers AB \*\*\*collagen\*\*\* flake compositions and with with biodegradable \*\*\*sponge\*\*\* \*\*\*sponge\*\*\* \*\*\*collagen\*\*\* biodegradable or -like compositions. The products of the invention includes biodegradable \*\*\*collagen\*\*\* flake compositions and biodegradable \*\*\*collagen\*\*\* \*\*\*sponge\*\*\* \*\*\*sponge\*\*\* -like compositions. The products are or useful for medical applications, like skin reconstruction, treatment of wounds, especially deep wounds, also in connection with surgery, including cosmetic surgery. The invention also deals with biocompatible \*\*\*sponge\*\*\* or \*\*\*sponge\*\*\* -like and flake synthetic resin products for medical and similar applications. The invention contemplates the treatment of human and animal species. CAS INDEXING IS AVAILABLE FOR THIS PATENT. ANSWER 27 OF 28 USPATFULL on STN L889:36231 USPATFULL ΑN Bio compatible and blood compatible materials and methods TΙ Woodroof, E. Aubrey, Santa Ana, CA, United States ΙN Sterling Drug Inc., New York, NY, United States (U.S. corporation) PA19890509 PI19820422 (6) US 1982-370977 AΙ Continuation-in-part of Ser. No. US 1979-5319, filed on 22 Jan 1979, now RLI abandoned DT Utility FS Granted Primary Examiner: Apley, Richard J.; Assistant Examiner: Cannon, Alan W. EXNAM Beehler, Pavitt, Siegemund, Jagger, Martella & Dawes LREP Number of Claims: 10 CLMN Exemplary Claim: 1 ECL No Drawings DRWN LN.CNT 1342 CAS INDEXING IS AVAILABLE FOR THIS PATENT. Bio- and blood compatible materials are prepared by treating the surface AΒ of a substrate to provide reactive primary or secondary amine groups sites which are activated by treatment with a dialdehyde or arylchloride for coupling to a biological in an amount sufficient to provide compatibility. The use of specific substrates, such as a compliant, and \*\*\*matrix\*\*\* elastic material, such as a fabric-elastomer membrane results in a product having advantageous qualities as a thermal burn \*\*\*dressing\*\*\* , breast prostheses and implants. Detailed procedures and various products are described. CAS INDEXING IS AVAILABLE FOR THIS PATENT. ANSWER 28 OF 28 USPATFULL on STN Г8 89:27504 USPATFULL ΑN Bio compatible and blood compatible materials and methods ТT Woodroof, E. Aubrey, Santa Ana, CA, United States IN Sterling Drug Inc., New York, NY, United States (U.S. corporation) PA

19890411

19820625 (6)

Continuation-in-part of Ser. No. US 1982-370977, filed on 22 Apr 1982,

now abandoned which is a continuation-in-part of Ser. No. US 1979-5319,

US 4820302

US 1982-392018

PI AI

RLI

filed on 22 Jan 1979, now abandoned

DT Utility FS Granted

EXNAM Primary Examiner: Apley, Richard J.; Assistant Examiner: Cannon, Alan

LREP Beehler, Pavitt, Siegemund, Jagger, Martella & Dawes

CLMN Number of Claims: 10 ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 1363

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Bio- and blood compatible materials are prepared by treating the surface of a substrate to provide reactive primary or secondary amine groups sites which are activated by treatment with a dialdehyde or arylchloride for coupling to a biological in an amount sufficient to provide compatibility. The use of specific substrates, such as a compliant, and elastic material, such as a fabric-elastomer membrane \*\*\*matrix\*\*\* , results in a product having advantageous qualities as a thermal burn \*\*\*dressing\*\*\* , breast prostheses and implants. Detailed procedures and various products are described.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> log y
COST IN U.S. DOLLARS

FULL ESTIMATED COST

SINCE FILE TOTAL ENTRY SESSION 148.14 239.07

STN INTERNATIONAL LOGOFF AT 17:37:56 ON 23 DEC 2005